

# Health Behavior Models

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Health educators use many different models for understanding behavior change and designing successful interventions. We have briefly summarized three commonly used models with examples and typical applications. Our intention is to provide a quick reference. For more in depth information, see the list of resources.

## **A** Health Belief Model

The Health Belief model is one of the first behavior change theories developed. According to this model, changes in behavior depend on five factors:

1. **Perceived severity**—the belief that a health problem is serious
2. **Perceived threat**—the belief that one is susceptible to the problem
3. **Perceived benefit**—the belief that changing one's behavior will reduce the threat
4. **Perceived barriers**—a perception of the obstacles to changing one's behavior
5. **Self efficacy**—the belief that one has the ability to change one's behavior

*Example:* A routine doctor visit reveals that a woman is at risk for heart disease due to family history (perceived threat). She knows that her mother and father both died prematurely from heart problems (perceived severity). Her doctor tells her that regular exercise would be the best way to reduce her risk of heart disease (perceived benefit). The doctor prescribes a walking program.

*Behavior change is a complex process, often difficult to achieve and sustain. Health professionals realize that, in their work to encourage healthy behaviors, they are competing against powerful forces, involving social, psychological and environmental conditioning. Information is not enough. The benefits of behavior change must be compelling.*

The woman knows that with work and family it will be hard to find time to walk (perceived barriers). Driving home from work she sees a billboard promoting daily walks as part of one's morning and evening routine. She tries getting up 30 minutes earlier each day to walk two miles and finds success with this routine (self efficacy).

The Health Belief model provides insights for why people make health decisions and creates a process for encouraging change. It is also useful in understanding how to design health education programs and persuasive messages.

## **B Stages of Change or The Transtheoretical Model**

The Stages of Change model (Prochaska, 1979) provides a framework for explaining how behavior change occurs. According to this model there are five stages of change:

1. **Precontemplation**—not thinking about changing behavior
2. **Contemplation**—thinking about changing in the near future
3. **Decision**—making a plan to change behavior
4. **Action**—implementing the plan to change behavior
5. **Maintenance**—continuation of behavior change

The Transtheoretical model views behavior change as a process in which individuals are at various stages of readiness to change. The Stages of Change Model is not linear. People can enter and exit at any point and some people may repeat a stage several times.

*Example:* A pack-a-day smoker is vaguely uncomfortable about smoking in the presence of non-smokers, and may even have thought about quitting, but is content to keep smoking (precontemplation). A few times recently while visiting a friend who is also a smoker, they go outside rather than smoke around the children. Our smoker's wife has also asked him to smoke outside to protect their infant son. She convinces him to make an appointment to talk to his doctor about secondhand smoke and quitting options (contemplation).

After looking at his options, he signs up for a self-help program and sets a quit date (decision). On his quit day he begins using the patch and follows the self-help program guide for ways to break old habits (action). He relapses after a week, but tries to quit again several times (contemplation and action). With encouragement from friends and family, help from his doctor and the program guide, he keeps trying (decision) and finally quits for good (action). Even though it's been a year since his last cigarette, he avoids situations that trigger a desire to smoke and regularly rewards himself for not smoking (maintenance).

The Transtheoretical model acknowledges that not everyone is ready to change behavior. This model is useful in designing health programs targeted at particular stages of change or for moving individuals through different stages.

## **Social Cognitive Theory**

The Social Cognitive Theory (Bandura 1977) proposes that behavior change is influenced by the environment, personal factors, and aspects of the behavior itself. The theory explains the education process through a number of “constructs.” Those constructs which have applications in health education are:

1. **Reinforcement**—Reinforcements are either positive or negative consequences of a behavior.
2. **Behavior capability**—In order for a change to take place, one must learn what to do to change and how to do it.
3. **Expectancies**—The value one places on the expected result. If the result is important to the person, the behavior change that will yield the result is more likely to happen.
4. **Self efficacy**—Belief in one's ability to successfully change one's behavior. Self efficacy is connected with another construct called “outcome expectations.” These are the benefits one expects to receive by changing one's behavior.
5. **Reciprocal determinism**—The dynamic relationship between the individual and the environment.

Social Cognitive theory helps a health educator understand the complex relationships between the individual and his or her environment, how actions and conditions reinforce or discourage change, and the importance of believing in and knowing how to change.

## **Resources**

Bandura A. *Social Foundations of Thought and Action*. 1986

Glanz K, Lewis FM, Rimer BK. *Health Behavior and Health Education: Theory, Research and Practice*. 1990.

McKenzie James, Jurs Jan. *Planning, Implementing, and Evaluating Health Promotion Programs: A Primer*. 1996.

National Institute Of Health, National Cancer Institute. *Theory at A Glance*. 1997.

Rosenstock IM, Strecher VJ, Becker MH. "Social Learning Theory and the Health Belief Model." *Health Education Quarterly*. v15, 1998.

